

PICEAS – Pacific Island Cetacean and Ecosystem Assessment Survey

Weekly Report, November 10 - 16, 2005

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The last week of cruise operations for PICEAS leg 4 has passed on, with one important detail to report – the last day of effort in the study area was conducted in what we thought were near perfect sighting conditions – winds of 10-12 knots and a Beaufort 4 sea state. As we scan the printouts of effort, sea state, and sightings from all legs, it's great to take stock of all that has been accomplished. Despite all the bad weather and long boring days, we managed to do quite well overall. There are interesting patterns for some species, and we had far more sightings of false killer whales - our main species of concern - than during the 2002 HICEAS project in the Hawaiian EEZ. The data we have collected during the past months will be very valuable as we move forward in our efforts to understand the cetaceans of this region, and to mitigate fishery impacts. Many thanks to the crew of the Mac II and all the scientists who participated for making this cruise such a successful venture.

Marine Mammal Sighting Summary

111005	0653	N15:50.76 W157:14.94	59.5 nmi	6.0
	1756	N14:17.59 W158:23.99		
111105	0637	N13:38.60 W158:51.76	95.4 nmi	5.0
	1637	N12:16.91 W159:51.43		
111205	0640	N13:29.06 W160:15.20	98.0 nmi	5.4
	1755	N14:52.42 W159:14.73		
111305	0644	N15:10.52 W160:24.30	108.8 nmi	4.4
	1755	N16:39.95 W159:19.79		
111405	0642	N17:52.07 W159:00.12	101.7 nmi	5.0
	1738	N19:29.41 W158:28.71		
111505		In port - Honolulu		
111605		In port - Honolulu		

CODE	SPECIES	TOT#
015	Steno bredanensis	1
021	Grampus griseus	1
036	Globicephala macrorhynchus	2
072	Balaenoptera edeni	1
	TOTAL	5

Biopsy Weekly Report (Suzanne Yin and Mark Deakos)

No biopsy opportunities

Photo-ID Weekly Report (Chris Cutler and Beth Goodwin)

	Weekly Total	Cruise Total
Humpback whale fluke IDs	0	4
Bryde's whale	0	4
Melon-headed whale (# groups)	0	5
False killer whales (# groups)	0	5
Pilot whales (# groups)	2	15
Striped dolphins (# groups)	0	3
Spotted dolphins (# groups)	0	4
Spinner dolphins (# groups)	0	10
Fraser's dolphins (# groups)	0	2
Killer whales (# groups)	0	1
Risso's dolphins (# groups)	1	2
Rough-toothed dolphins (# groups)	0	1
Bottlenose dolphins (# groups)	0	3

Acoustics Squeakly Report (Shannon Rankin and Jen Pettis)

Well, believe it or not, our final array managed to last us the remainder of this leg, with a threatening increase in static and noise on the final day of effort. We managed to survive with a few recordings of pilot whale, Risso's dolphins, rough-toothed dolphins, sperm whales, and a bunch of unidentified dolphins. In the final hours, to make amends for the worst cruise in SWFSC acoustics history, we were treated with a lovely series of boings produced by a minke whale far out of our range.

Seabird Squawk (Michael Force and Sophie Webb)

This, our final squawk from the PICEAS study area, encompassing only five days, yet is not without a few surprises. We managed to dig up 22 species, a respectable total considering the short "week." A Ring-billed Gull, living up to the colloquial moniker "seagull," about 440 nm south-southwest of Ka Lae (South Cape), Hawaii, turned a few heads, being hundreds of miles from the closest Burger King (loafing around fast food outlets is an important winter survival strategy in many urban areas). It was definitely out of range, although this species is one of the more regularly



Ring-billed Gull (*Larus delawarensis*), scrounging for a hand-out (photo: Sophie Webb)

occurring vagrant gulls to reach Hawaii during the winter. Interesting as well, was an area where we encountered high numbers of moulting Hawaiian Petrels (at least 98%). This could suggest pelagic age-class segregation since birds in their first year don't moult. As a matter of fact, most of the Hawaiian Petrels seen during Leg 4 were moulting. Black-winged Petrel, the most widespread *Pterodroma* seen during the PICEAS cruise, has practically dropped out of sight as we head north. We have seen this delightful bird every single day since the second week of September. Herald Petrel, only about the third or fourth for PICEAS, a single Buller's Shearwater, the first since 6 September, and two Flesh-footed Shearwaters were red-letter sightings this week.

Oceanographic Data Collections (Mindy Kelley, Lacey O'Neal, and Scott Benson)

This was a quiet week for oceanographic operations. As we headed back toward Oahu we thought we might see one more rise in the thermocline and maybe a few interesting animals from the remaining net tow operations. Looking back, we were wrong. The thermocline remained around 100 to 150 meters and the net tow samples spared us no such entertainment. The week continued on as operations slowly came to a finish. Sunday, we cast the last CTD of the season (Figure 1) and finally put the net tows to rest. We pulled through Monday with the last remaining XBT casts for Leg 4 and then finally closed the curtain later that evening.

As this short week and the bulk of the PICEAS oceanographic operations come to a close, I would like to thank all of you that provided helping hands during the past few months. Thanks to you all!

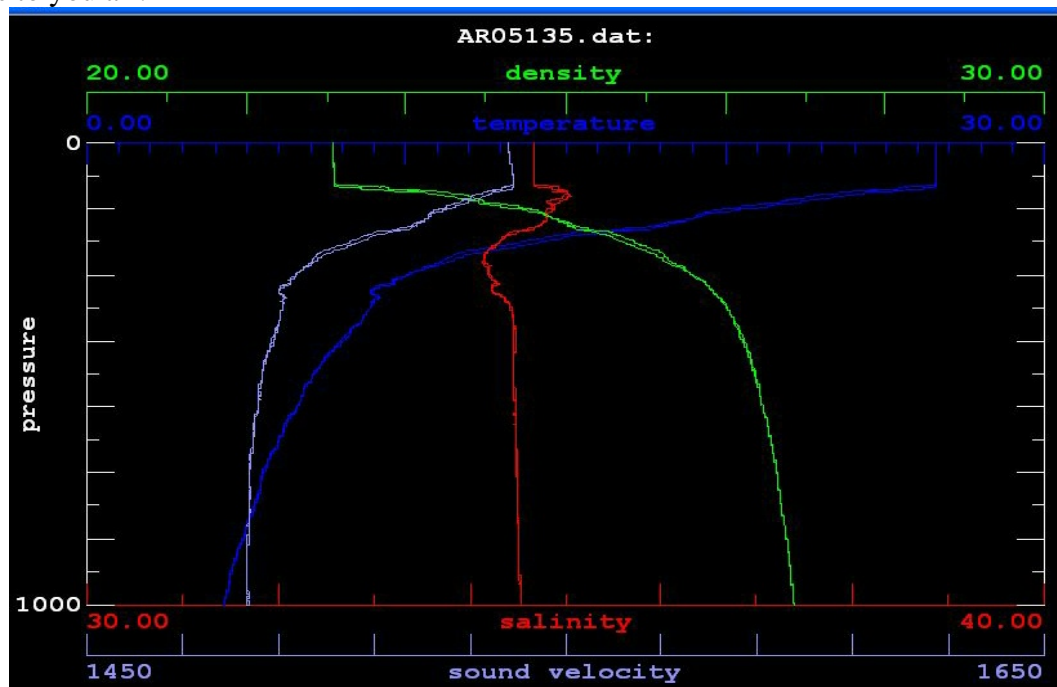


Figure 1. Last CTD cast of the season.

DATE RANGE	DAY	CTD	XBT	Bongo	Manta	Comments
PICEAS05 Leg 4 11/10 to 11/15	Thursday	2	4	1	1	
	Friday	2	3	1	1	
	Saturday	1	4	1	1	
	Sunday	1	4	1	1	
	Monday	0	5	0	0	
	Tuesday	0	0	0	0	In Port
	Wednesday					
	Totals	6	20	5	5	

Flyingfish Finale (Jim Cotton)

As we pulled into Honolulu, having completed Leg four, the dipping season officially came to an end. Our season totals are as follows:

- 58 Four-winged flyingfish
- 168 Two-winged flyingfish
- 210 lantern fish
- 61 short-winged flyingfish (more closely related to halfbeaks than flyingfish)

These numbers are low by ETP standards, but the diversity and lure of catching different species has more than made up for the windy nights at the rail. Several of the four-winged specimens await final identification, to species level back at the lab. Initially, it appears that we have collected two or three species that are not represented in our master collection. We left behind at least two species that were photographed but not caught, always something to come back for.

Thanks to all the dippers (Scott Benson, Chris Cutler, Shannon Rankin, Juan Carlos Salinas, and Sophie Webb our aquarium keeper) for donating their time at the end of long days to help with the collecting and putting up specimens. This project would not have been as successful or as fun without them - looking forward to seeing everyone at spring training/tryouts.